

SPECIFICATION FOR APPROVAL

產品確認書/製品仕様書

FILE SERIAL NO./文件序號:

XSG200722120020-L01

CUSTOMER / 客 戶:

ARTICLE / 品 名:

SWITCHING POWER SUPPLY

MODEL NO. / 機種型號:

XSG1202000

PARAMETER / 規 格:

12V 2A

CERTIFICATE/認證:

CB,UL,CUL,FCC,PSE,CE,GS,SAA,RCM,C-tick,KC,ROHS

ISSUE DATE / 發行日期:

2020/7/22

Please to sign back after you confirm

承認書確認後請回簽一份

この仕様書をご確認とご署名の上、対象の営業窓口にご返信いただきますよう宜しくお願い致します。

CUSTOMER AUTHORIZED 客戶確認		
Approved by	Checked by	Prepared by

SUPPLIER AUTHORIZED 供方確認		
Approved by	Checked by	Prepared by
李麗敏	賀子豐	張文娟

*感謝您的支持，我們十分珍惜每次合作機會

*Thank you for your support, we will treasure the opportunity to cooperate with you

Rev.版本	Description of change/ 變更內容描述		Changed Date 日期	Approved
	Before(變更前)	After/變更後		
A	Original Release(初次發行)		2007/8/26	李麗敏
B	Label updated(標貼版本變更)		2010/6/20	王曉
C	Certificates updated(證書更新)		2018/1/22	李麗敏



* Make practical and safe power supply, Be enterprise with honesty and responsibility

* 提供實用安全的電源，做誠信負責的企業

* 実用的、安全な電源を提供し、誠実と信用、責任を持つ企業。

Table of Content(目錄)

[illegible]

EDITION	C	PAGE	2/9
---------	---	------	-----

1.SAFETY STANDARD / 安規標準

- 1.1 The green mode power supply shall be certified by the following international regulatory standards: 充電器應符合下列的國際標準：

Certificate 證書	Country 國家	Standard/安規標準	Certificate 證書	Country 國家	Standard/安規標準
■ UL/CUL	USA/CA 北美	UL/CSA62368-1; UL/CSA60950-1;	■ FCC	USA	FCC Part 15 Sub-part B
■ UKCA	United Kingdom 英國	BS EN 62368	■ CE	Europe 歐洲	EN55032;EN55024; EN55020;EN61000; EN55014;
■ CB	Global 全球	IEC62368;IEC60950; IEC61558;IEC60335	■ KC	Korea 韓國	K60950-1
■ PSE	Japan 日本	J60950-1; J61558	■ SAA/RCM	AU 澳洲	AS/NZS 60950

2.INPUT FEATURE / 輸入特性

- 2.1 INPUT VOLTAGE RANGE: 90Vac to 264Vac. 輸入電壓範圍可以從90Vac到264Vac.
- 2.2 RATED INPUT VOLTAGE: 100Vac to 240Vac. 額定輸入電壓從100Vac到240Vac.
- 2.3 INPUT FREQUENCY RANGE: 47Hz to 63Hz. 輸入頻率範圍從47Hz到63Hz.
- 2.4 INPUT CURRENT: 0.6A max.&100-240Vac. 最大輸入電流0.6A(輸入條件100-240Vac)
- 2.5 INRUSH CURRENT: 35A max. at 100-240Vac input for a cold start at 25℃.在准開機條件下，最大浪湧電流不超過35A (輸入條件100-240Vac).
- 2.6 EFFICIENCY: higher than 86.2% at 100-240Vac input and output full load. 效率高於86.2% (輸入100-240Vac 和輸出滿載條件) .
- 2.7 No-Load Input Power Dissipation/輸入空載功率損耗: Input 115Vac or 230Vac,output no load, the input power loss is less than 0.1W. 輸入115/230V交流，在空載時，輸入功耗小於0.1W.

3.OUTPUT/輸出特性

RATED OUTPUT / 額定輸出	SPEC. LIMIT / 規格限定		REMARK / 備註
	Min. value	Max. value	
Output regulation / 輸出電壓規格	11.4VDC	12.6VDC	12V ±5%
Output load / 輸出負載規格	0.0A	2A	
Ripple and Noise / 輸出紋波及雜訊	—	<150mVp-p	20MHz Bandwidth 10uF Ele. Cap.& 0.1uF Cer. Cap
Output Overshoot / 輸出過沖幅度	—	10%	
Line regulation / 電壓調整率	—	±1%	
Load regulation / 負載調整率	—	±5%	
Turn-on delay time / 開機延遲時間	—	3000mS	
Hold up time / 關機維持時間	10mS	—	Input voltage:115Vac
	20mS	—	Input voltage:230Vac

EDITION	C	PAGE	3/9
---------	---	------	-----

4.4 IELECTRIC WITHSTANDING STRENGTH(HI-POT) / 絕緣介電強度（耐壓）

Primary to Secondary AC3000V, 10mA,1 minute for type test, 3 second for production.

一次側對二次側：AC3000V, 10mA標準測試1分種，量產測試3秒鐘。

5.PROTECTION FEATURE / 保護特性

5.1 OVER—CURRENT PROTECTION / 過電流保護：

The green mode power supply shall be hiccup when any output operating in overload condition(set@ Max load 120~180%) under any line condition for an indefinite period of time. The power supply shall be self — recovery when the fault condition is removed.

在任何時候任何輸入條件，當輸出操作在超載條件最大電源的（120~180%）時，電源供應器將進入打嗝模式，當故障被移走後，電源要能自動恢復到正常。

5.2 SHORT—CIRCUIT PROTECTION / 輸出短路保護：

The power supply shall be hiccup and no damage shall occur when any output operating in a short circuit condition under any line condition for an indefinite period of time. The power supply shall be self—recovery when the fault condition is removed.

在任何時候，任何輸入條件下，當輸出操作在短路情況下，電源供應器將進入打嗝模式，當故障消失後，電源要能自動恢復正常。

6.ENVIRONMENTAL CONDITIONS / 環境條件

6.1 OPERATING / 操作條件：

The power supply shall be capable of operating continuously in any mode without performance deterioration in the following environmental conditions.

在下列環境條件下，電源供應器要能夠連續操作在各種模式，且不能造成性能的退化。

6.1.1 Operating Temperature: -25℃~40℃ 環境測度：-25℃~40℃

6.1.2 Relative Humidity: 10%~90% 相對濕度：10%~90%

6.1.3 Vibration: 1.0mm, 10—25Hz, 15 minutes per cycle for each axis (X, Y, Z)

6.1.4 Cooling: The power supply will operate with convection cooling. Blocking of vents must not cause damage to the power supply..

電源供應器將操作在對流冷卻的環境下，即使將通風口阻塞電源也不允許有任何損傷發生。

6.2 NON—OPERATING / 非操作條件：

The power supply shall be capable of withstanding the following environmental conditions extended periods of time, without sustaining electrical or mechanical damage and subsequent operational deficiencies.

電源供應器要能夠長期的經受下列的環境條件，且不允許有電氣級機械方面的損傷和併發的操作的缺失

6.2.1 Storage Temperature: —30℃~70℃ 環境溫度：—30℃~70℃

6.2.2 Relative Humidity: 10%~90%相對濕度：10%~90%

6.2.3 Color of case and cable / 外殼及線材顏色：Black / 黑色

EDITION	C	PAGE	4/9
----------------	----------	-------------	------------

6.2.4 Vibration and Shock / 振動和衝擊

The power supply shall be designed to withstand normal transportation vibration per MIL — STD — 810D, method 514 and procedures X, as it is mounted in the chassis assembly and packed for shipping.

電源供應器出貨的包裝設計，均要能承受正常運輸的振動，並符合MIL—STD—810D方法514 和程式 X。

6.2.5 Dropping Packed / 跌落試驗：

X-Y-Z direction 90cm, one time with each direction

X-Y-Z三個方向高度0.9m每個方向各一次

7. EMC STANDARDS / 電磁相容性標準**7.1 EMI STANDARDS / EMI 標準**

The power supply met the radiated and conducted emission requirements for FCC CLASS B, EN55022 CLASS B.

本電源供應器符合輻射及傳導要求，滿足FCC CLASS B, EN55022 CLASS B.

7.2 EMS STANDARDS / EMS 標準

The power supply shall meet the following EMS standards: 本電源供應器滿足下列EMS標準

7.2.1 EN61000—4—2: 1995 / A1: 1998 Electrostatic Discharge(ESD)

7.2.2 EN61000—4—3: 1996 / A1: 1998 Radiated Electromagnetic Fields(RS)

7.2.3 EN61000—4—4: 1995 Electrical Fast Transient / Burst(EFT)

7.2.4 EN61000—4—5: 1995 Lighting Surge Attachment. Line to Neutral: 2KV

8 RELIABILITY AND QUALITY CONTROL / 可靠性及品質控制**8.1 BURN—IN / 老化**

The power supply shall undergo a minimum of 4 hours Burn — In test under full load at 40℃ ~ ±5℃

電源應在40℃ ~ ±5℃和滿載條件下老化4 小時。

8.2 COMPONENT DERATING / 元件溫度要求

Semiconductor junction temperatures shall not exceed the manufacturer's maximum thermal rating. 半導體結溫不允許超過其製造商要求的最大溫度值。

9. WEIGHT / 重量

The weight of the power supply shall be about 150 g. 電源的重量大約為150g。

10. MECHANICAL REQUIREMENT / 結構參數

The power supply size: L72.3*W47.1*H36.5mm. 外殼尺寸：L72.3*W47.1*H36.5mm

11. INSULATION RESISTANCE / 絕緣阻抗

Input to output: 50M OHM(500VDC)輸入對輸出50兆歐姆（500VDC）

EDITION	C	PAGE	5/9
----------------	----------	-------------	------------

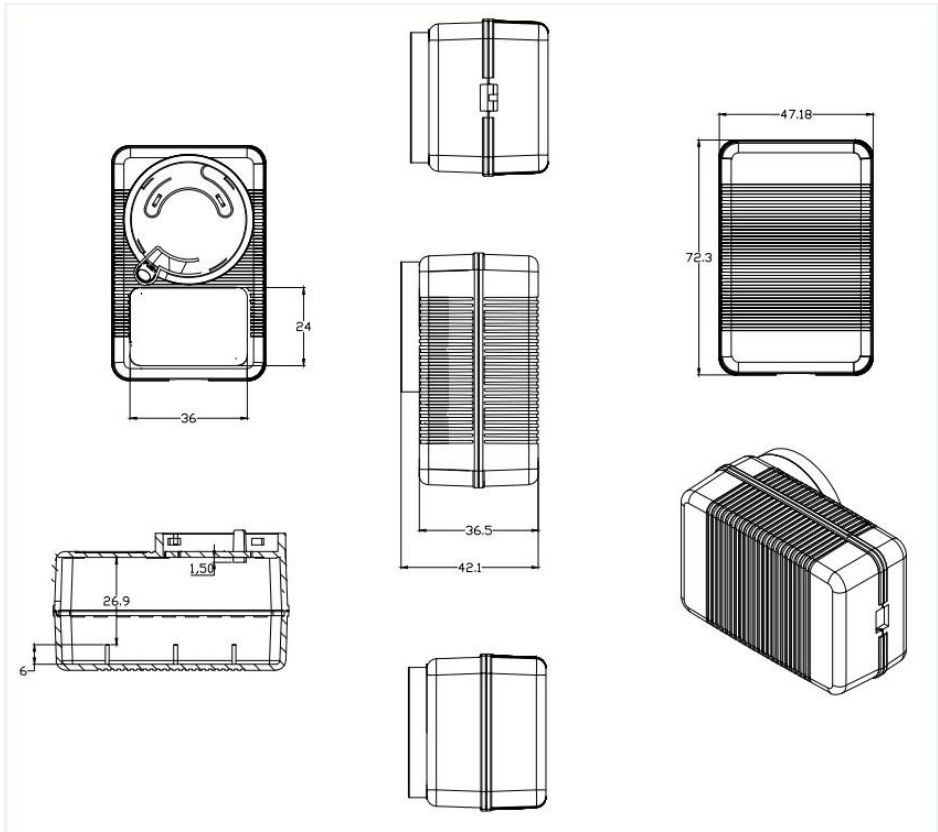
12.LEAKAGE CURRENT / 漏電流

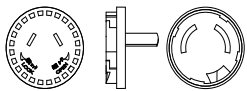
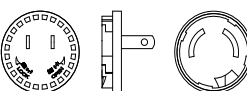
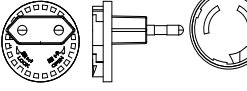
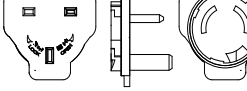
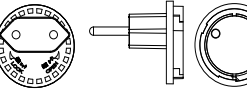
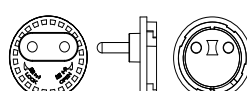
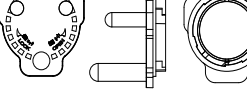
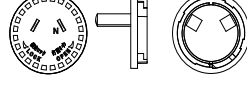
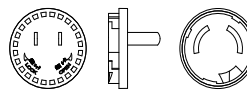
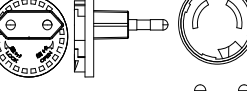
The leakage current shall be less than 0.25mA for class II when power supply is operated maximum input voltage and maximum load. 當電源供應器操作在最大輸入及最大負載情況下，其漏電流應小於0.25mA, 滿足class II等級。

13.MAJOR MEASURE EQUIPMENT / 主要測量設備; VERIFIED BY THE THIRD LAB/外校

- | | | |
|---|--|----------------------------|
| A | AC SOURCE / 交流輸入充電器: AFC-500W,校準頻次: 1次/年 | ☐ ✓ |
| B | POWER METER / 充電器功率計: CHROMA 2100,校準頻次: 1次/年 | ☐ ✓ |
| C | ELECTRONIC LOAD / 電子負載: PRODIGIT 3310C,校準頻次: 1次/年 | ☐ ✓ |
| D | OSCILLOSCOPE / 存儲示波器: TDS-2012B,校準頻次: 1次/年 | ☐ ✓ |
| E | DIGITAL MULTIMETER / 數字式萬用表: Fluke 4.5,校準頻次: 1次/年 | ☐ ✓ |
| F | DC POWER / 直流輸入充電器: WYK-6030,校準頻次: 1次/年 | ☐ ✓ |
| G | HI-POT TESTER / 耐壓測試儀: LANKE 7112,校準頻次: 1次/年 | ☐ ✓ |
| H | INSULATION RESISTANCE TESTER / 絕緣電阻表: YD2681A,校準頻次: 1次/年 | ☐ ✓ |

EDITION	C	PAGE	6/9
---------	---	------	-----



 澳規插腳 AU PLUG ☒ (40*40*27)	 美規/日規插腳 US/JP PLUG ☒ (40*40*27)	 歐規插腳 EU PLUG ☒ (40*40*47)	 英規/新加坡規插腳 UK/SG PLUG ☒ (49*46*32.5)
 巴西規插腳 BR PLUG ☐ (40*40*47.5)	 印度規插腳 IN PLUG ☐ (40*40*30.5)	 大南非插腳 ZA PLUG ☐ (44*45.5*39)	 阿根廷規插腳 AR PLUG ☐ (40*40*26.7)
 中國插腳 CN PLUG ☐ (40*40*27)	 韓規插腳 KR PLUG ☐ (40*40*47)		

Material/材料: PC

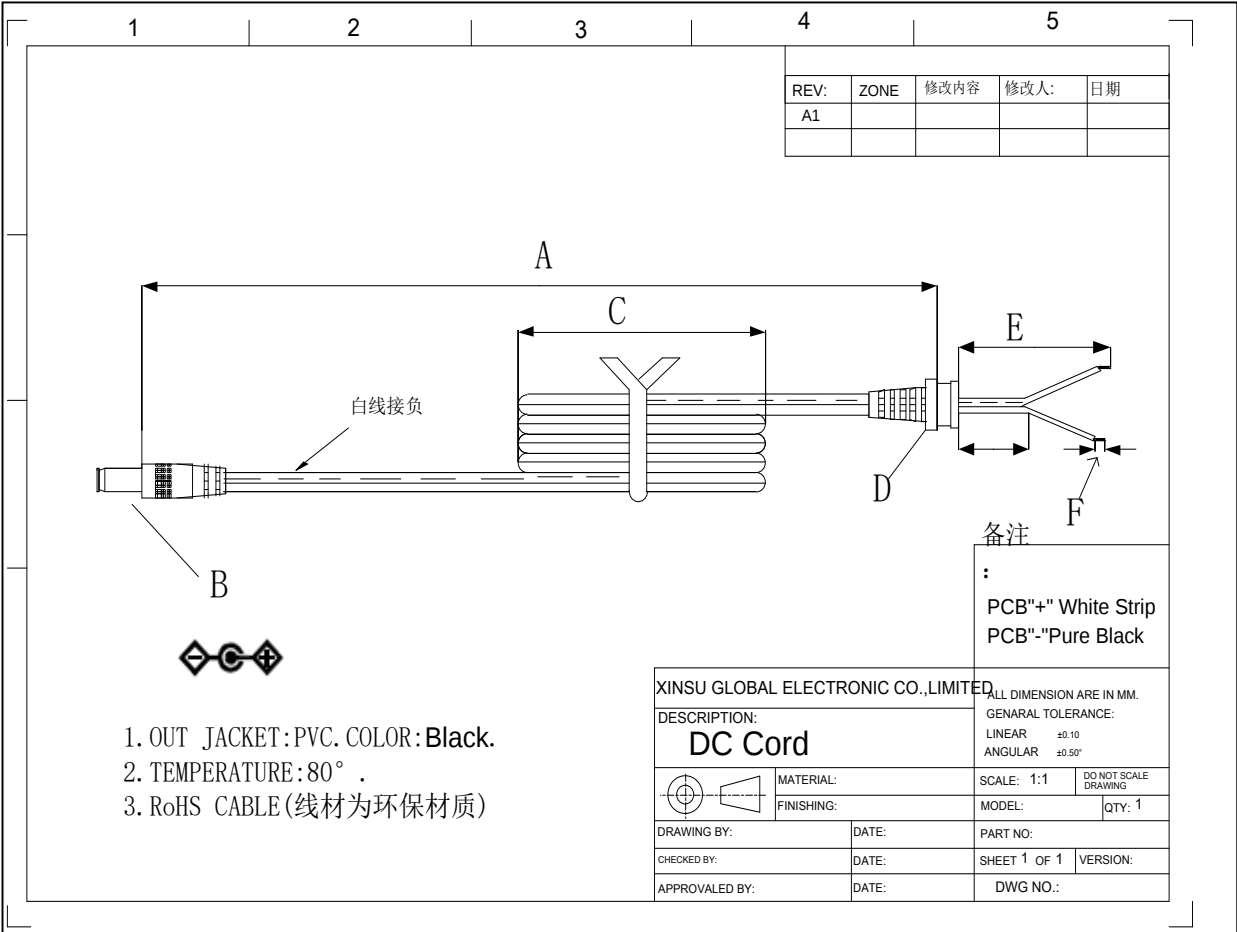
Brand/品牌: GE

Fireproof Class/防火等級: UL94V-0

Color/顏色: Black/黑色

EDITION	C	PAGE	7/9
---------	---	------	-----

DC CORD / 輸出 線材

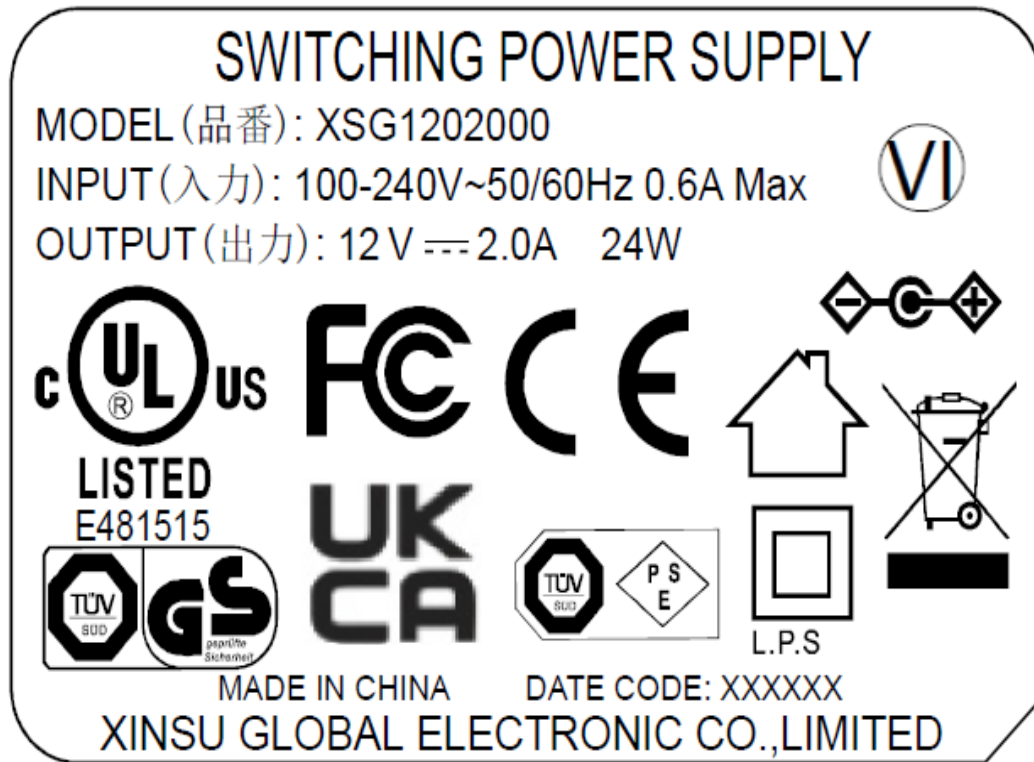


Cable Specification/線材規格

UL 22AWG*2C 2468 L=1.2M Black 80'C

Item No	Part Name（部件名稱）	Description（描述）
A	Length of DC cord(DC線長度)	1.2M
B	Size of DC connector（DC頭尺寸）	5.5*2.1*10MM, Inner Positive Outer Negative
C	Length of coil（線包長度）	70MM±10
D	SR NO(線卡編號)	XYX-XL008
E	Length of inlet wire（出線長度）	30MM±1
F	Tinned length（吃錫長度）	4MM±1

EDITION	C	PAGE	8/9
---------	---	------	-----



Print/印刷 ☒

Laser Carving/鐫雕 ☐

- 1.Silver text on black background黑底銀字
- 2.Material: PET 底材為消銀龍.
3. Clear Printing, Wipe Resistance絲印清晰，耐擦拭.
- 4.Gum Permanent永久背膠.
- 5.Meet Requirements of Environmental Protection符合環保要求

EDITION	C	PAGE	9/9
---------	---	------	-----